

THE EXCAVATION OF THE CHAMBERED CAIRN AT CRARAE, LOCH FYNESIDE, MID ARGYLL

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INTRODUCTION

THE chambered cairn at Crarae, Loch Fyneside, Mid Argyll, lies within the policies of Crarae Lodge, the property of Sir George I. Campbell of Succoth, Bt., D.L. Crarae Lodge adjoins the main Inveraray-Lochgilphead road, about $10\frac{3}{4}$ miles from Inveraray; the road at this point runs close to the west shore of Loch Fyne (fig. 1).

The beautiful gardens at Crarae are now a great attraction to visitors. That this secluded and fertile part of Mid Argyll has been favoured by man from a remote period is proved by the existence not only of the chambered cairn to the south of the Crarae River, but also of the remains of a round cairn, known as the 'Fairy Knowe', lying rather less than a furlong to the north-east of the chambered cairn, on the opposite side of the river. Less than 100 yards south-east of the chambered cairn lies the old burial ground of Killevin, into one wall of which is built an early Christian sculptured stone. The two most prominent stones at the front of the chambered cairn were known as the 'Killevin Stones' (Pl. I, 3).¹

The chambered cairn and the Fairy Knowe are clearly referred to in the Namebook to the first Ordnance Survey (1865-6), parish of Kilmichael Glassary, and I am indebted to Mr A. L. F. Rivet, of the Archaeology Division of the Ordnance Survey, for the following quotation from the Namebook - 'Some time ago four stone coffins containing human bones, and ashes were found near the ruins of the old Church, and in a mound in a field below Crarae Inn another was found, also containing Bones and Ashes. The mound at one time was surmounted by a standing stone.'² Crarae Inn is now Crarae Lodge. The 'four stone coffins' are marked as 'Stone Cists found' on the O.S. 6-inch sheet, Argyllshire CLI (1885 edition), and may be identified with the burial chamber of the chambered cairn. The same O.S. sheet shows 'Stone Cist found' on the site of the Fairy Knowe, whilst the 'mound in a field below Crarae Inn' must be the Knowe itself.

In August 1923 Sir George, assisted by Mr David MacRitchie, of Edinburgh, and Mr V. Hodgson, Hon. Secretary of the West Highland Museum, carried out an excavation of the Fairy Knowe. An account of the excavation subsequently appeared in the *Oban Times*, but in view of the interesting results obtained, and of their possible bearing upon some of the evidence found during the excavation of the chambered cairn across the river, it has been considered best to summarise the account in

¹ I am greatly indebted to Sir George Campbell for allowing me to draw upon his records and personal knowledge of Crarae in order to amplify the evidence available from other sources; he has also been so kind as to read through my original draft introduction and to suggest several corrections to and improvements upon it. Sir George further points out that the hill immediately to the N. of Crarae Lodge, now surmounted by a flagstaff, is known as *Craig an Eirachdais* - 'the hill of assemblage'.

² Book No. 2, p. 21.

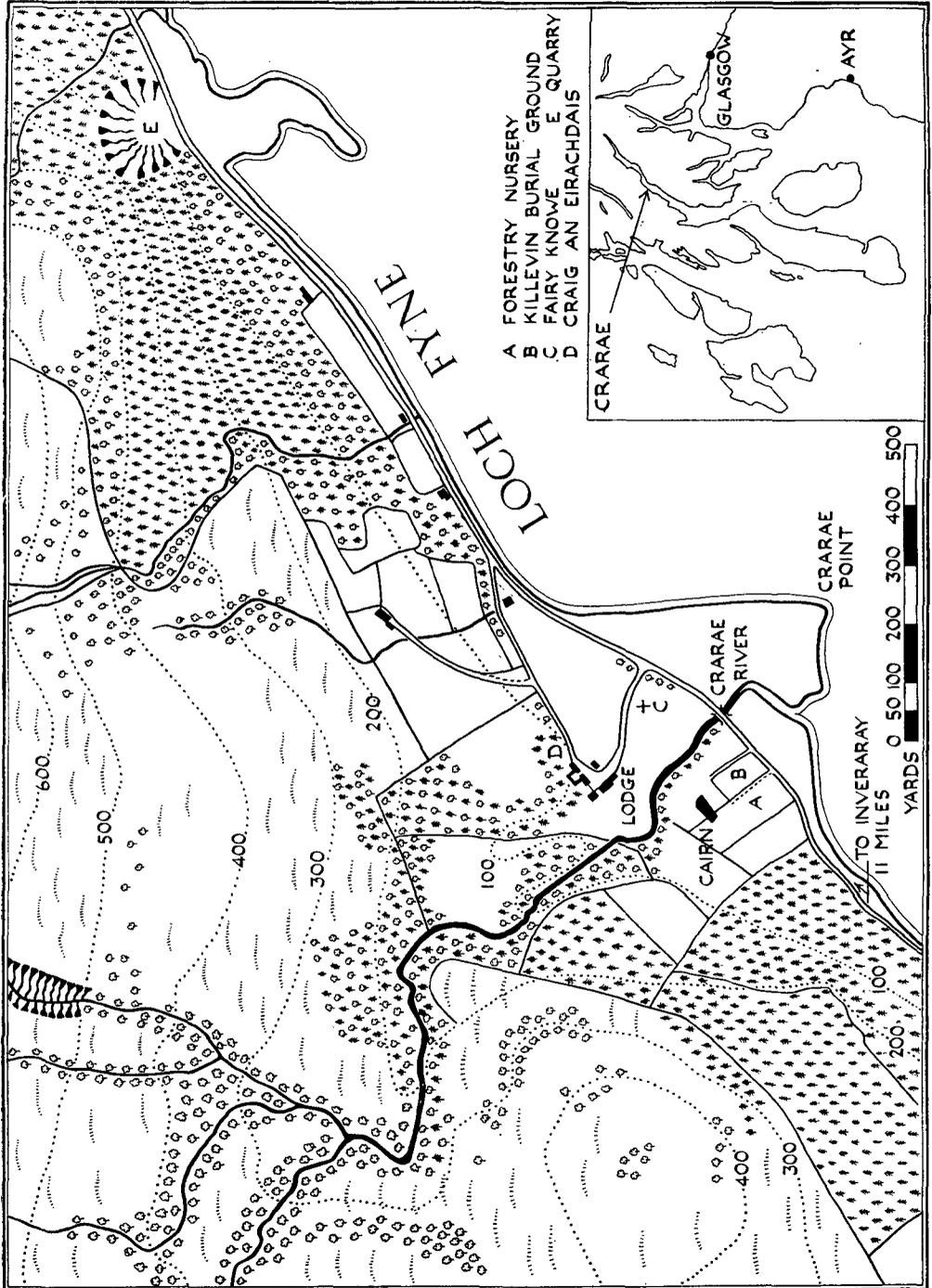


Fig. 1. The site and its setting

Appendix A, adding to it certain further unpublished information in Sir George's possession, and kindly contributed by him. It is worth recording that already in 1923 the 'Killeevin Stones' had been recognised as part of a chambered cairn by Sir George and his colleagues.

Fresh interest in the chambered cairn was aroused as a result of the formation of the Natural History and Antiquarian Society of Mid Argyll in 1955. I was invited by Sir George to look at the site, and had little doubt that it was indeed that of a Clyde-Carlingford chambered cairn.

Sir George readily agreed to three seasons of excavation, in 1955, 1956 and 1957, each lasting approximately three weeks. My wife and I were responsible for the excavation; we are most grateful to Sir George for his kindness in promoting and encouraging our efforts at all times and for providing accommodation for the first two seasons, as well as supplying labour and a tractor to move stones which were beyond our normal resources. Thanks are due to Miss Marion Campbell of Killeberry, Miss Sheila M. Cregeen, Miss Mary Sandeman and Mr Eric R. Cregeen, among others, for their valued help with excavation and survey work.

Crarae is one of a great many sites of Clyde-Carlingford cairns which have been discovered or confirmed in Scotland since Childe published his latest list.¹ The cairn does not appear to have been known to Childe, nor have other references to it as such been traced.

DESCRIPTION

The Site and its Setting (figs. 1, 2; Pl. I, 1)

The greater part of the parish of Kilmichael Glassary consists of rocky uplands, with an average elevation of between 800 and 1,000 ft., given over almost entirely to grazing and to forestry. The conformation of the rocks turns the drainage of this upland area in a predominantly NE. to SW. direction, approximately parallel to the trend of Loch Fyne itself between Inveraray and Lochgilphead. Few rivers of any size in the parish drain directly into Loch Fyne. The Crarae River is one exception, having cut a glen through the barrier to reach the more level ground opposite Crarae Point, near which it debouches into the loch.

Crarae Lodge stands at the mouth of the glen cut by the Crarae River. Beyond the glen extends gently undulating ground for rather more than $\frac{1}{4}$ mile in each of three directions – to the E., to the SE. at Crarae Point and to the S. (Pl. I, 1). It seems reasonable to assume that this flatter ground, which all lies below the 100 ft. contour level, is composed largely of raised beach material, for its apparently sandy or gravelly nature can be checked at several points in the area. This fertile ground, in a landscape largely unfavourable to exploitation by primitive agricultural methods, must have seemed especially attractive to Neolithic settlers, and would have been readily visible to parties sailing up Loch Fyne from settlements in the Clyde estuary further S. The existence of the chambered cairn at Crarae is yet another example of that correlation between chambered cairn and fertile ground in SW. Scotland first pointed out by Professor V. Gordon Childe over a quarter of a century ago.²

¹ *Scotland before the Scots* (1946), pp. 99–101.

² *Scot. Geo. Mag.*, I (1934), 18–25.

Within the policies of Crarae Lodge, on the W. side of the Crarae River, is an area trapezoid in shape and approximately 95 by 75 ft. in size, bounded by hedges. The longer axis of this area lies approximately E.-W. To N., S. and E. lie gardens, to the W. the forestry nursery for the estate (fig. 2).

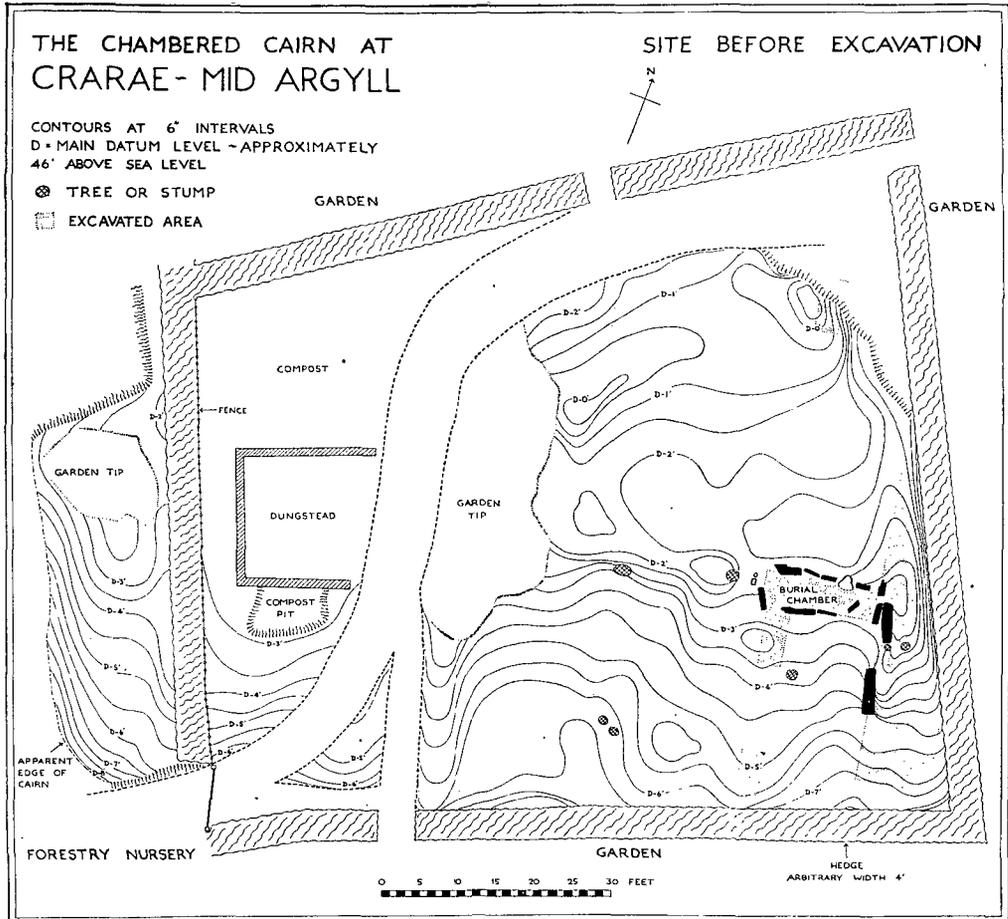


FIG. 2. Contour plan of the site

The existence of this relatively large area of rough ground within such closely cultivated gardens might well seem strange. A portion of it indeed serves as garden tip and dungstead; the rest, now grass-covered, has not been integrated into the gardens simply because it still consists of a great mass of boulders forming the body of the chambered cairn.¹ Indeed this cairn material, still grass-covered, extends beyond the enclosed area for some 16 ft. to the W., into the forestry nursery (Pl. I, 2).

¹ Nat. Grid ref. NR 987974; site approximately 46 ft. above sea level.

Summary of the Results of Excavation

The site proved to be that of a Clyde-Carlingford chambered cairn, one of the largest outside Arran of its type in Scotland. The cairn was orientated from E. to W., and was probably trapezoid in shape. At the E. end was an elaborate, almost flat façade, consisting of massive upright stone slabs joined by sections of drystone walling, demarcating a forecourt which may have been paved. A complex entrance, consisting of two sets of portal stones, leads from the forecourt into the burial chamber, the lower part of which survives, though the roof has disappeared. No other burial chambers were found.

Both inhumed and cremated burials had been placed in the burial chamber, accompanied by offerings including pottery, a flint arrowhead and hazel nuts. Finally the entrance had been sealed by a stone slab and a blocking of boulders piled in front of entrance and façade.

Visible Remains before Excavation (fig. 2; Pl. I, 2, 3)

The edges of the cairn were nowhere certain except to the W., where the tail projected into the forest nursery. Here its height was about 3 ft. The trapezoid shape of the enclosure surrounding the cairn and the narrow, apparently intact tail are the reasons for thinking that the cairn was originally designed as a trapezoid structure.

The surrounding hedges masked the character of the monument, but at the E. end could be seen two massive upright stone slabs – the ‘Killevin Stones’ – in line approximately from N. to S., the northerly one, which later proved to be an outer portal stone of the burial chamber, lying only 6 ft. away from the adjacent hedge (Pl. I, 3). Extending behind the portal to the W. for some 14 ft. were lines of stone slabs, their edges only just traceable above the grass, marking the sides and end of the burial chamber. Thus at the outset there were clear indications of both burial chamber and façade at the E. and wider end of the cairn.

Method of Excavation

A plan of the whole site, with 6-inch contours inserted, was prepared. A transverse section was laid out across the cairn from N. to S. in such a way as to cross the rear of the burial chamber. To complete the cutting of this section down to original ground level for its entire length proved to be too big a task for the labour force available. The transverse section across the burial chamber itself was completed to original ground level, and taken to a similar depth through the 7 ft. of cairn material lying immediately to the S. The final 7 ft. at the S. end of the section, as far as the hedge, were similarly completed. On the opposite side of the cairn the extreme N. end of the section was examined.

The burial chamber was excavated in two halves, so that a central longitudinal section of the filling could be drawn. This section was extended through the entrance and across the blocking outside the entrance.

Finally the blocking was removed down to original ground level, or else to the

level of the paving, where such appeared to exist. Not all the supposed paving slabs were taken up, and a point was made of replacing those which had been moved.

The Excavation

Where the cairn material was exposed it proved to consist chiefly of boulders, large and small, such as might be obtained today from the nearby Crarae River (Pl. I, 4). In the transverse section the cairn survived to a height of over 4 ft. (fig. 3), and there is little doubt that, though concealed in places and robbed or disturbed in others, cairn material exists over the greater part of the enclosed area.

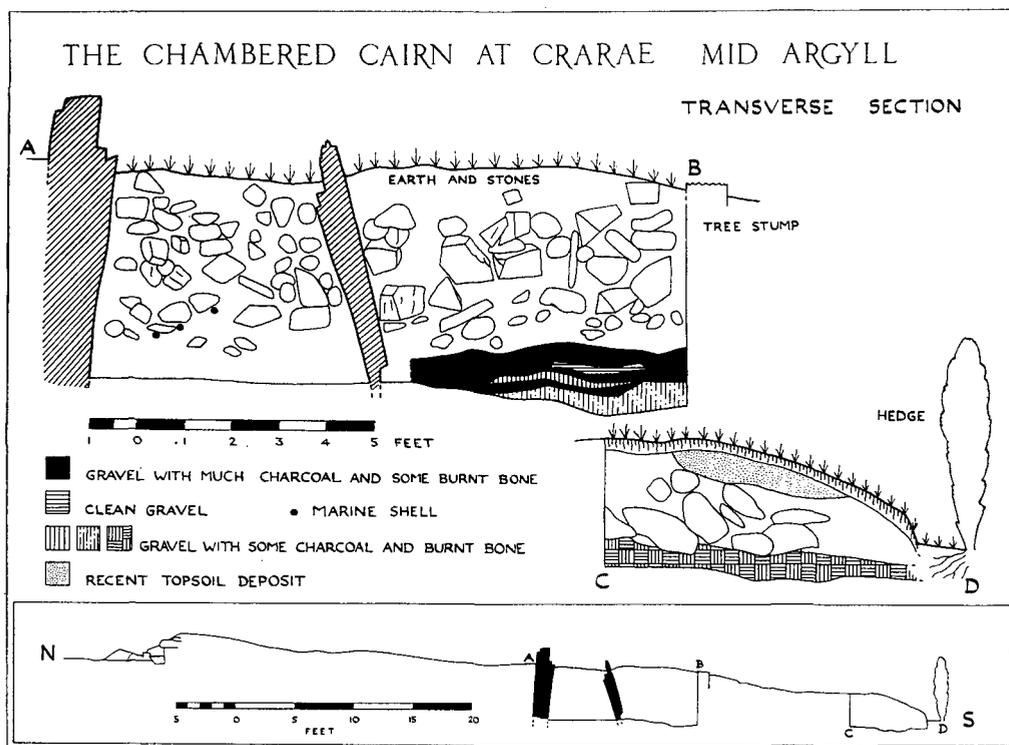


FIG. 3

The main axis of the cairn lies athwart ground which slopes gently from N. to S., and there was some evidence from the transverse section at its southern end that large boulders had been laid at intervals parallel with the main axis to prevent 'creep' of cairn material down the slope (fig. 3). No definite edge to the cairn could be traced at either end of the transverse section, nor could revetment or kerb be detected elsewhere.

The present length of the cairn from the entrance of the burial chamber to its tail in the forestry nursery is 110 ft. The greatest apparent breadth is 72 ft.; the breadth at the tail is 12 ft. If the burial chamber were originally placed centrally

at the E. end of the cairn then it could be inferred from the cairn material as it now is that the original breadth might have been as much as 85 ft.

The subsoil wherever it was encountered beneath the cairn material proved to be of fine loose gravel. At original ground level the gravel was invariably darker in colour, containing a good deal of comminuted charcoal and fragments of burnt bone. In the transverse section adjacent to the burial chamber it was observed that layers of clean gravel might occur intercalated with layers of dark gravel (fig. 3). These might be explained as due to disturbance when the orthostats of the burial chamber were being erected.

The surface of the forecourt at original ground level consisted very largely of loose gravel, darkened by charcoal fragments, containing pieces of burnt bone and seeming to correspond very closely with the material from the original surface found beneath the cairn material in the transverse section. In a pit approximately 2 ft. wide dug some 6 in. below the original surface at the S. end of the forecourt was a deposit of nearly 2,500 marine shells, mostly of *Venerupis pullastra* but all of edible molluscs (fig. 4, Appx. C).

Overlying the gravel in the forecourt was a somewhat random scatter of stones, mostly small slabs, which had the appearance of paving. Their insecure foundation in loose gravel, together with subsequent disturbance caused by the blocking of the burial chamber entrance, make this difficult to prove (fig. 4; Pl. II, 3, 4). The possibility must be borne in mind that stones from the nearby drystone walling may have been torn down and used in the first stages of building the blocking; these stones would, of course, be predominantly slabs.

Undisturbed original blocking could not certainly be traced in the northern part of the forecourt, but in the southern part consisted of a layer of stones not much more than 1 ft. deep, very similar to the cairn material (Pl. II, 1). Immediately in front of the entrance, however, the blocking was more massive and much more firmly packed (fig. 5). In the southern half of the forecourt some stones had obviously fallen forward from the drystone walling (Pl. II, 1). Again the possibility must be borne in mind that this tumble was deliberate, for it was impossible stratigraphically to disentangle tumble from blocking proper.

The front of the cairn was masked by a great mound of loose stones, to a depth of nearly 4 ft., reveted immediately in front of the entrance to the burial chamber by a sizable stone slab (fig. 5). This mound and the use of the slab as revetment were entirely modern, for intermingled with the stones were pieces of slag, iron, china, coal and two parts of the upper stone of a rotary quern (fig. 11). The entrance to the burial chamber had been closed by a small stone slab, vertically placed and held in position by stones piled in front of it (Pl. IV, 2). This slab did not seem to have been disturbed.

Removal of the blocking revealed the façade, which proved to be flat except for the remains of drystone walling curving outwards at its S. end. Its extant width is 35 ft., but its N. end appears about to continue in a straight line when it ceases on meeting the line of the hedge (figs. 4, 6; Pl. II, 4). The façade was evidently planned as a series of massive upright stone slabs joined by stretches of drystone walling,

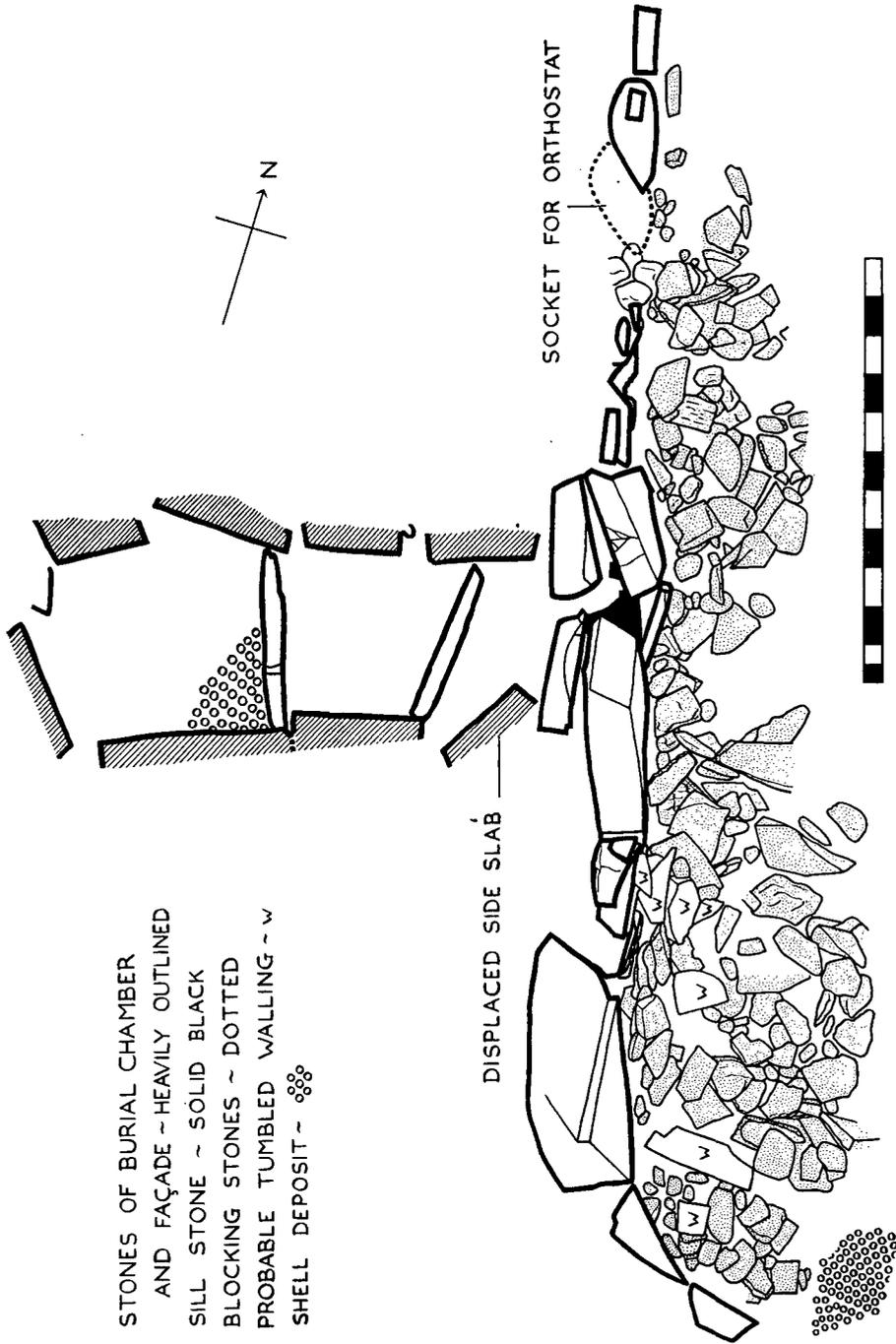


FIG. 4. Plan of the burial chamber, façade and blocking

with both outer portal stones of the burial chamber entrance as prominent features.

To the S. of the entrance the first massive façade stone survives, some 8 ft. 6 in. by 5 ft. 6 in. in size, set approximately in line with the portal stones. The corresponding stone to the N. of the entrance has disappeared, but its shallow socket remains. It may be remarked that the two largest slabs of the façade, the S. outer portal stone and the S. façade stone, were bedded hardly at all into the ground, but leant against and were supported by the S. inner portal stone and the cairn material respectively.

Immediately to N. and S. of the entrance, sections of drystone walling survived, the S. section to a height of at least 3 ft. Attention may be drawn to deliberate tooling of one of the stones of the N. section – a projecting point of rock has been trimmed away to make the face of the walling uniform (Pl. II, 2).

Beyond the S. façade stone the surviving drystone walling curves in an easterly direction, reduced to two contiguous foundation slabs. A thorough search was made for signs of continuation of the line of the façade beyond these stones, but no evidence either of further walling or of another façade stone was forthcoming. The two surviving stones were bedded on gravel, but seemed to be undisturbed.

Beyond the socket of the missing N. façade stone there was also a foundation course of drystone walling, but as already pointed out this continued the straight line of the façade until interrupted by the line of the hedge.

The Burial Chamber (figs. 2, 4, 7; Pl. III, 1-4)

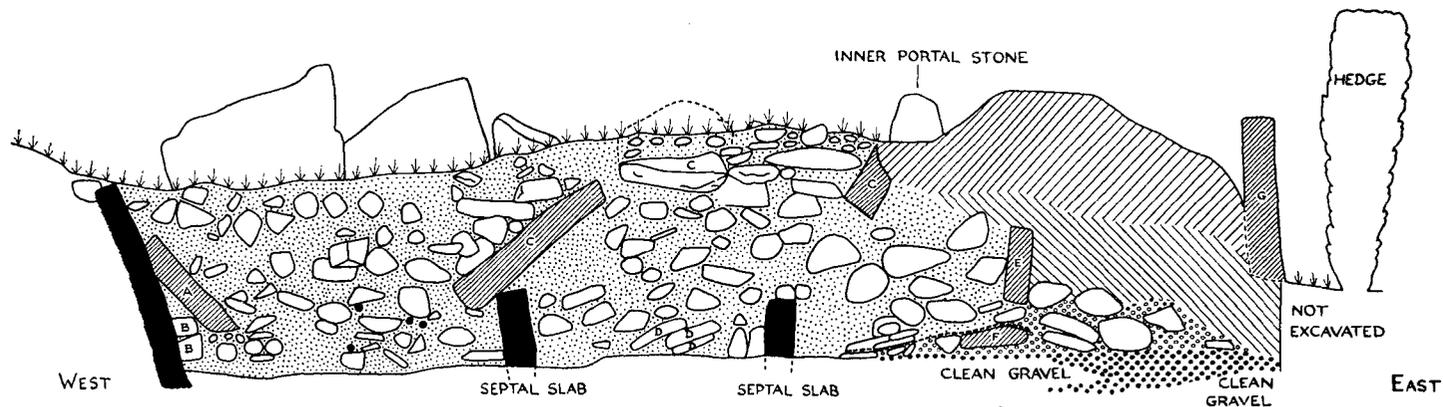
The burial chamber at original ground level is 13 ft. 6 in. long. Its width varies from 4 ft. 6 in. to 5 ft. 6 in. Its height to the top of the tallest side slab is 6 ft. The main axis is 61° E. of true N. The entrance is at the E. end. The floor was apparently of gravel, probably the original subsoil.

The N. side of the burial chamber consists of four massive upright stone slabs, of which the third from the front overlaps the fourth (fig. 7). The S. side consists of three slabs and, although two of these are exceptionally massive, nevertheless it is rather more than 1 ft. shorter than the N. side. No attempt seems to have been made to square the end, nor was the end slab wide enough by itself to close the chamber; a gap in the NW. corner had been filled by a small slab originally propped in position on two smaller stones (Pl. III, 2, 3, 4).

Two septal slabs divide the chamber into three parts. Whatever ritual significance this division may have had there can be no doubt that at Craræ these slabs had an important structural function. Mention has already been made of the loose gravelly subsoil. This must have made it most difficult to obtain secure foundations for upright slabs. Most such slabs used in the burial chamber had narrow but pointed bases, yet none seemed to penetrate far into the subsoil. Indeed, the septal slabs were themselves exaggerated versions of the same principle, both being almost triangular in shape, with one angle inserted into the ground. The septal slabs were placed so as to give maximum support to the sides; it is noteworthy that the slab nearest the portal on the S. side was not so supported, and was found to have partially collapsed into the chamber (Pl. IV, 1). With such unstable foundations little

THE CHAMBERED CAIRN AT CRARAE ~ MID ARGYLL

SECTION ~ BURIAL CHAMBER AND FORECOURT BLOCKING



- %% DIRTY GRAVEL, PART OF ORIGINAL BLOCKING
- GRAVEL CONTAINING CARBON AND BURNT BONE
- /// STONES RECENTLY DUMPED
- \\ STONES AND EARTH CONTAINING MODERN REFUSE
- MARINE SHELL
- COMPACT BROWN LAYER, PERHAPS TRODDEN

- A DISPLACED TERMINAL SLAB
- B DRYSTONE WALLING BENEATH A
- C DISPLACED SLAB, PROBABLY ROOF CORBEL
- D FALLEN SLAB, PERHAPS PLACED TO PROTECT BURIAL
- E BLOCKING STONE
- F SILL STONE
- G UPRIGHT SLAB, RECENTLY ERECTED

FIG. 5

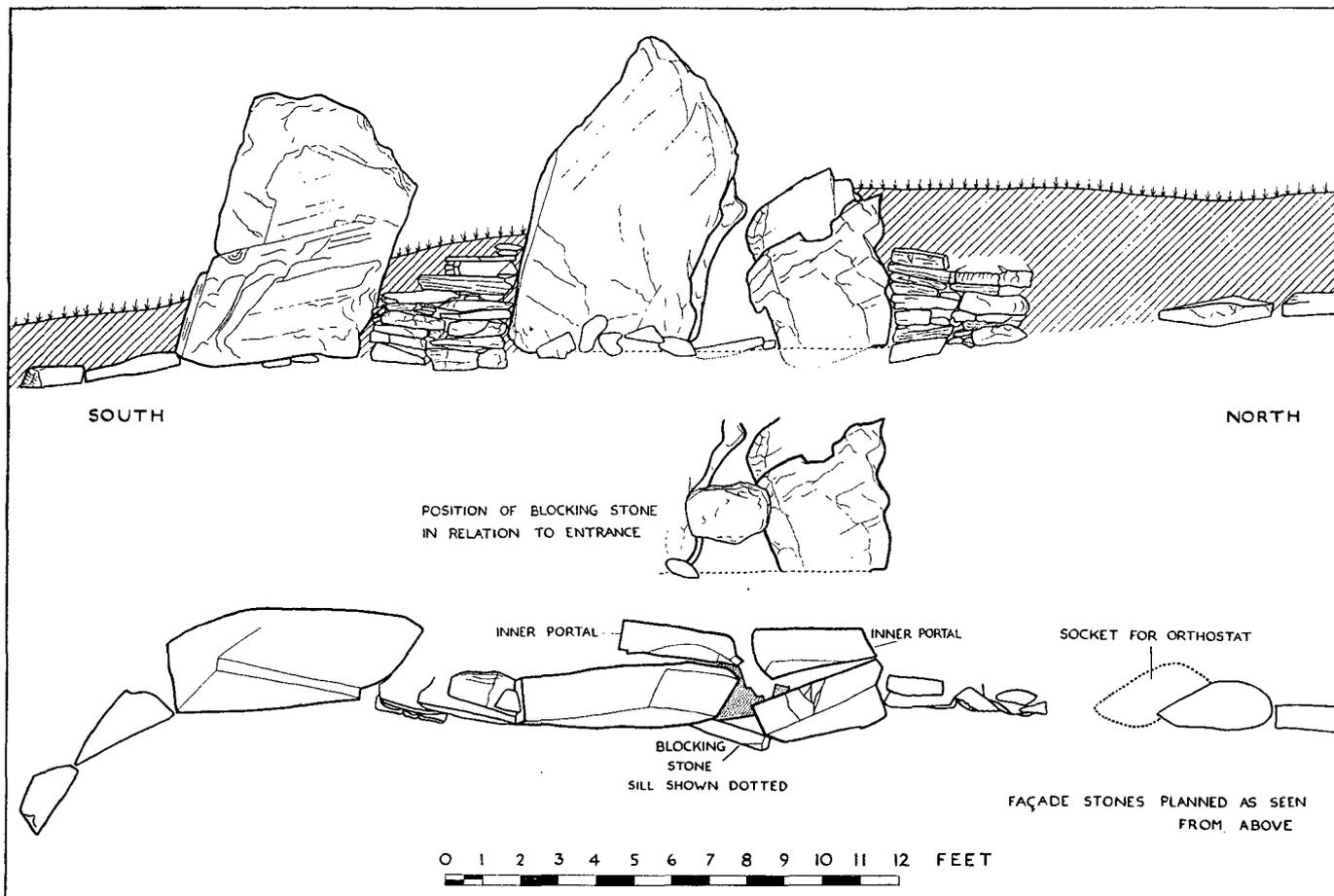


FIG. 6. Plan and elevation of the façade

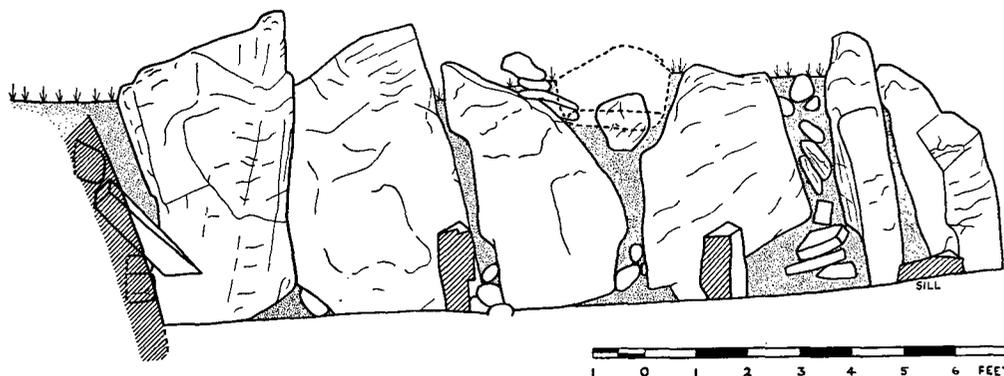


FIG. 7. Elevation of the north side of the burial chamber

advantage would be gained by relying in the construction of the burial chamber on that overlapping or imbrication of the side slabs found in many Scottish cairns of the Clyde-Carlingford group.

A gap between the first and second slabs on the N. side was filled by a boulder, and above this was found a horizontal slab partially collapsed into the chamber (fig. 7; Pl. III, 1). This seems to be the only certain evidence to suggest the drystone walling which no doubt once completed the sides up to roof level. A large stone found embedded in the filling of the burial chamber was not long enough to have spanned the chamber completely, but might well have been a corbel stone (figs. 5, 8; Pl. IV, 1). No other traces of a roof were found.

The entrance had two sets of portal stones, an inner and an outer, and so was of complex type (figs. 4, 6; Pl. IV, 3).¹ The inner portals were hardly more massive than the slabs of the burial chamber. The outer portal stones abutted directly upon the inner. The S. outer portal stone was exceptionally massive, as had been pointed out. The N. portal stone, though obviously less huge originally, has been mutilated, and may once have been far taller than it is now. Between the portal stones was a sill (Pl. IV, 4). The cheeks of the portal stones incline inwards, thereby reducing the size of the entrance, but there is no doubt that the gap was big enough to be used when required (fig. 6).

Contents of the Burial Chamber (figs. 5, 8, 9, 10)

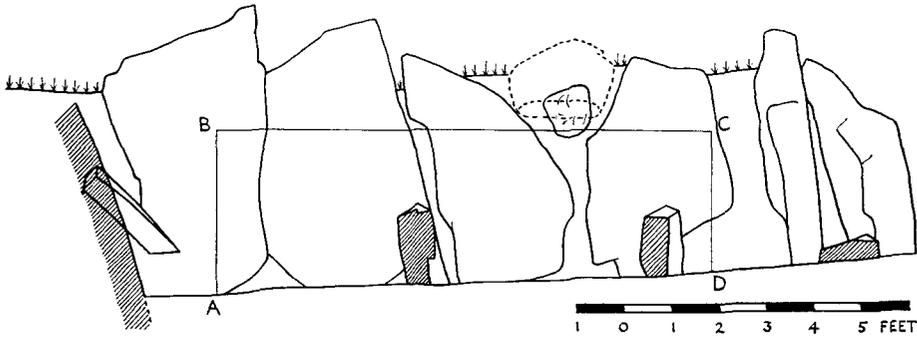
The average depth of the filling of the burial chamber was 4 ft. Small stones and earth formed the greater part, though a few larger slabs, possibly displaced corbel stones, were incorporated (fig. 5, C). That much of this filling was recent was shown when a decayed tree root had to be removed from a depth of about 2 ft. in the rear segment. It did not prove possible to distinguish between original filling and later tumble or replacement of material previously dug out. All that can be said is that it was possible at some stage for the largest slab in the filling, perhaps a corbel slab, to fall so as to come to rest against the rearmost septal slab, with its lowest point only

¹ *P.S.A.S.*, LXXXIX (1955-6), 45-46. For discussion of this feature see *infra*, pp. 17-18.

about 1 ft. above the floor of the burial chamber (fig. 5), whilst as has already been pointed out at some period there was so little filling in the front of the burial chamber that one of the side slabs could partially collapse into it.

In the front segment there were no finds at all. In the middle segment there were fragments of bone and human teeth, both burnt and unburnt, potsherds, a broken lozenge-shaped flint arrowhead, hazel nuts, charcoal and a few marine shells. One small group of unburnt bones lay beneath a small slab (Appx. D, Group A). There were other similar slabs nearby, which gave the impression that they had been intended as a protection for the bones (fig. 5, D). All these finds were below the tops of the septal slabs (fig. 8).

In the rear segment above the floor level were fragments of bone and a human



ELEVATION OF NORTH SIDE OF BURIAL CHAMBER
AREA ABCD SHOWN ENLARGED BELOW

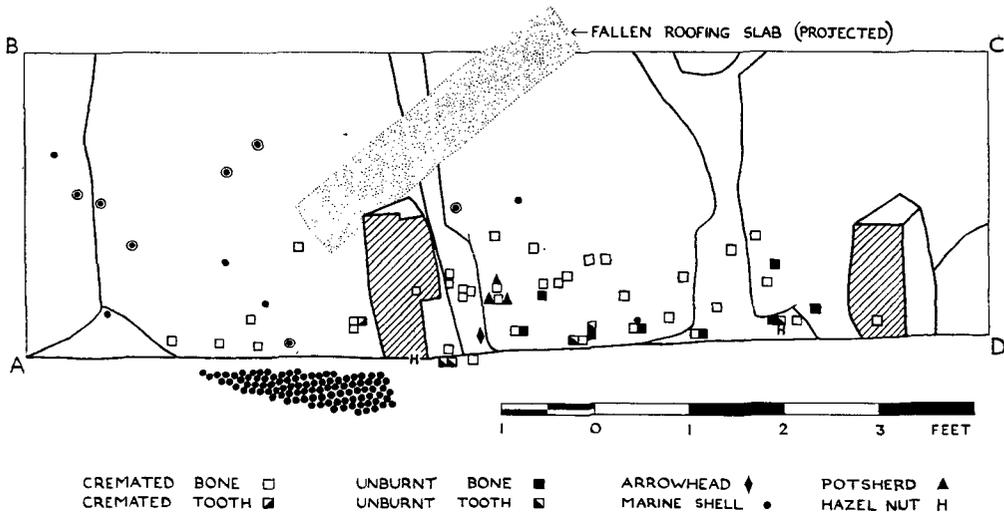


FIG. 8. Finds in the burial chamber shown in elevation

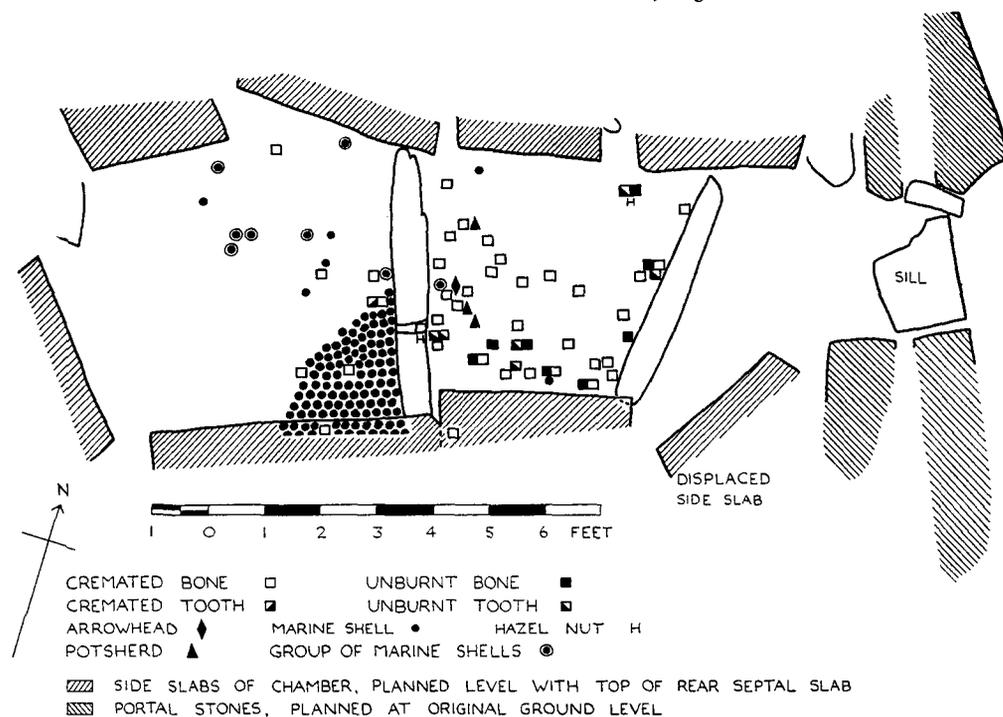


FIG. 9. Plan of finds in the burial chamber

tooth, all apparently burnt, and marine shells. Some of the shells were found above the level of the septal slabs, but in view of the proved disturbance in this segment this is not significant. The bone fragments were all below that level. Just below the floor level in the SE. corner of this segment was a deposit of nearly 2,500 marine shells (Appx. C).

In the front segment a compact brown layer, less than 1 in. thick, could be traced over the top of the sill and for some 2 ft. into the burial chamber. This layer may have been trodden into a compact mass during the time when the burial chamber was open (fig. 5).

DETAILS OF FINDS

(a) Pottery

Six *potsherds* were found, the largest by itself, the remainder in a group some 6 in. away, but since one sherd of the group fits the large sherd, and since all six might well be from the same vessel, they are considered together. All are undecorated body sherds of coarse, rather friable, gritty fabric with a dark greyish core and thin buff surfaces, both outside and inside, through which the grit occasionally appears. The thickness varies from $\frac{1}{4}$ in. on one of the small sherds to $\frac{1}{2}$ in. on the large sherd. Several of the edges show a degree of abrasion hardly to be expected in pottery placed in a burial chamber. The largest sherd is fairly sharply curved, and might be from a large *Beacharra* round-bottomed bowl like that at *Beacharra* itself.¹ Found at the W. end of the middle segment of the burial chamber, 6-9 in. above the original floor (figs. 8, 9).

¹ Figgott, S., *Neolithic Cultures of the British Isles* (1954), 169, fig. 27 (1), 171. This work is hereinafter cited as *Neolithic Cultures*.

(b) Stone

1. Tip of an *arrowhead* of white, possibly calcined chert, or cherty flint, finely worked with neat pressure-flaking on both faces. The straight sides show that the original arrowhead must have been lozenge-shaped and probably not less than 2 in. long, yet the maximum thickness is only $\frac{1}{8}$ in. The point is missing. Length $1\frac{3}{16}$ in., breadth $\frac{3}{4}$ in. Neolithic; found at the W. end of the middle segment of the burial chamber, about 2 in. above the original floor (figs. 8, 9, 10).

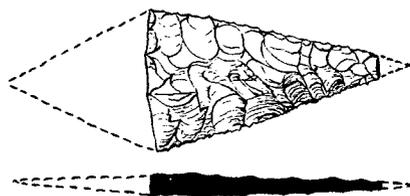


FIG. 10. Arrowhead (1/1)

2. *Flint*, probably in recent use as a strike-a-light when lost, traces of ferruginous staining being visible along one edge. The flint is the bulbar end of a thickly patinated flake, perhaps originally a Mesolithic artefact; the end is steeply battered. Size $1\frac{1}{8} \times 1$ in. Found in the forecourt area, almost in front of the burial chamber entrance, in material probably recently dumped.

3. *Upper quern stone*, of dark, greenish-grey rock, a picritic crinanite; a closely comparable rock occurs in a sill at Churchton Bay, on the W. coast of the isle of Raasay (Appx. B). The quern is of a low bun shape, 15 in. in diameter, the feed-pipe being $2\frac{3}{8}$ in. in diameter (fig. 11). Round the feed-pipe is a raised moulding, from which branch two similar mouldings towards the rim of the stone, almost surrounding the vertical handle-socket, which penetrates the stone. Within about $\frac{3}{4}$ in. of the edge of the stone the rather convex upper surface flattens out to give a well defined border. Found unstratified in front of the façade.

No close parallel to this quern has been traced, though it recalls a class of upper quern stone decorated with a cross, either incised or in relief, centred on the feed-pipe and with the vertical handle-sockets incorporated in the ornament. P. R. Ritchie, in an unpublished thesis, points out that such querns occur predominantly on the W. coast of Scotland, and in Ireland, in Cos. Tyrone and Fermanagh. Ritchie further draws attention to a variant of the type in which three equidistant arms in relief are centred on the feed-pipe. Though it is quite certain that the Craræ quern was not decorated with a cross, it might well have had a tripartite decorative arrangement, perhaps with three handle-sockets, each surrounded by mouldings. Such an arrangement indeed occurs on an upper quern stone, said to be of porphyry, now in Campbeltown Museum; this quern was found on Mid Lossit Farm, near Machrihanish.

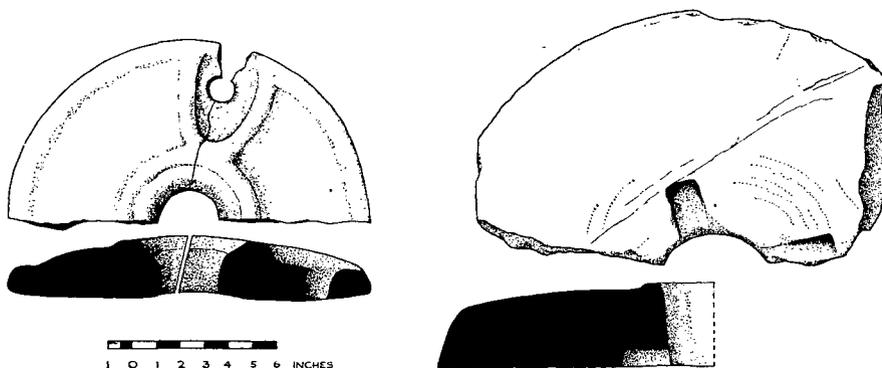


FIG. 11. Upper quern stones; section of lefthand stone angled to show detail.

Ritchie refers to the upper quern stone with raised collar and three vertical handle-sockets found in a thirteenth-century context at Jarlshof, whilst at Clough Castle, Co. Down, D. M. Waterman found part of an upper quern stone with a cross in low relief in a late fourteenth-century context.¹ On purely typological grounds it would be possible to argue for a development of the cross in relief from the cross merely outlined or incised, or alternatively for a degeneration of the relief form into the incised. Since Dark Age querns seem to be for the most part undecorated, it seems likely that the relief designs were produced in the Middle Ages. If so, then the pronounced mouldings of the Crarae stone would seem to point to a late rather than an early mediaeval date.

4. *Upper quern stone*, of a light fawn, almost ivory rock, a medium-grained granite, with little or no mica. The quern is of a low bun shape, with a pecked surface, and has a raised moulding round the feed-pipe; on the underside there has evidently been a cross-shaped socket for a rind; diameter about 2 ft., diameter of feed-pipe about 3 in. (fig. 11). Found set on end in clay overlying blocking in front of the N. wing of the façade.

The closest parallel to this quern stone seems to be the upper quern stone, 2 ft. 4½ in. in diameter and provided with a cross-shaped socket for a rind (though lacking a feed-pipe moulding), found by Miss A. S. Henshall unstratified in the long cist cemetery at Parkburn, Lasswade, Midlothian.² In a useful discussion Miss Henshall does not succeed in dating the Parkburn quern, but does not exclude the possibility that it may be contemporary with the cemetery, for which she suggests a third- to ninth-century date, most probably near the middle of that period.

DISCUSSION

Pre-Cairn Surface and Shell Deposits

The excavators of the Fairy Knowe found underneath the S. part of the cairn an extensive shell deposit, 2-12 in. thick, generally accompanied by 'the usual black unctuous matter' (Appx. A). The shells are similar to those found in the forecourt and in the burial chamber of the chambered cairn, whilst the black unctuous matter recalls the carbonised layers found at the old ground level beneath the chambered cairn. Perhaps each cairn was built upon ground previously inhabited. The quantity and spread of shells beneath the Fairy Knowe may be explained as the remains of a midden, but the two shell deposits at the chambered cairn are smaller and compact, and so are best interpreted as ritual.

The shell deposits associated with the chambered cairn imply that edible shellfish formed part of the diet of the builders of the tomb, and it is interesting to note that the shells were probably buried as shells, that is after the contents had been eaten (Appx. C). The forecourt deposit has a close parallel in the compacted mass of sea shells found by Piggott and Powell at the N. edge of the blocking of chambered cairn No. 1 at Cairnholly, in Kirkcudbright.³

The Façade and Burial Chamber

Undoubtedly the most impressive part of the cairn at Crarae is the splendid façade. A notable feature is the assured use of drystone walling. The deliberate

¹ Hamilton, J. R. C., *Excavations at Jarlshof, Shetland* (Ministry of Works Archaeological Reports No. 1, 1956), pp. 182, 189 and Pl. XXXV, 10; *Ulster J.A.*, N.S. xvii (1954), 115, 147, fig. 16, 2. I am indebted to Mr P. R. Ritchie for discussing this quern with me, and for allowing me to consult part of his unpublished thesis. My thanks are due also to Dr N. Holgate, of the Department of Geology in Glasgow University, who very kindly examined both this and the following quern stone. The evidence which he adduces for deriving the rock of this quern from Raasay is most interesting, and the implied trade contacts might be worth investigation (Appx. B).

² *P.S.A.S.*, LXXXIX (1955-6), 262 (fig. 4), 264, 265 (fig. 5), 276-7.

³ *P.S.A.S.*, LXXXIII (1948-9), 114.

trimming away of a projection on one of the stones, to make it uniform with the rest, has already been referred to, and is in keeping with the high standard of construction (Pl. II, 2).

It is unfortunate that the outer end of the N. wing of the façade has been destroyed, so that the mode of its termination is uncertain. Since the drystone walling which does survive continues the straight line of the façade, then a second façade stone on the N. wing might be inferred, producing a façade asymmetrical about the burial chamber entrance. This is not necessarily so. The missing N. façade stone was clearly far less broad than its counterpart to the S., so that in order that the façade might have wings of corresponding width an additional stretch of drystone walling might have been built on the N. side, until an equal length of straight façade had been attained on each wing. If this assumption be correct, then the N. wing might be expected to have begun curving outwards just beyond the last surviving wall slab. The gentle slope in the ground from N. to S. would to some degree have compensated for the difference in bulk between the upright stone slabs of N. and S. wings. On the other hand, there is today more cairn material to the N. than to the S. of the burial chamber, that is to say on the side of the cairn where the slope of the ground would not assist the spread of that material. On balance, therefore, such evidence as there is seems to suggest a façade originally asymmetrical about the entrance to the burial chamber, but with the shorter S. wing the more massively built.

The Ordnance Survey Namebook mentions 'four stone coffins' as having been found early in the nineteenth century. If these are to be equated with the burial chamber, then the presence today of only three segments in that chamber falls to be explained, since presumably the early explorers interpreted each segment as a 'coffin'. No trace of a third septal slab was found, and if there ever were one it must have been removed. It might be suggested that such a third septal slab might have been placed in the front segment to support the easternmost slab on the S. side of the burial chamber, and that the withdrawal of its support led to the displacement of that side slab (Pl. IV, 1).

The entrance to the burial chamber consists of two sets of portal stones, an inner and an outer (figs. 4, 6), and is of the type which I have elsewhere suggested should be termed complex.¹ I there gave reasons for believing that the complex entrance was a stage in the evolution of a simple entrance, consisting of two portal stones, into a complete crescentic façade of the type found, for instance, at Carn Ban, in Arran.² This theory finds its strongest support in the fact that, in Argyll and Bute at least, while only one cairn with evolved crescentic façade is found below 150 ft. above sea level, five occur at heights between 150 and 350 ft. and six at heights of over 350 ft. In other words, evolution of the façade apparently took place only after the lower coastal areas had been occupied and the exploitation of the higher inland areas had begun.³

The chambered cairn at Crarae appears to belong to an intermediate phase in

¹ *P.S.A.S.*, LXXXIX (1955-6), 45-46.

² *P.S.A.S.*, XXXVII (1902-3), 36-44.

³ *P.S.A.S.*, LXXXIX (1955-6), 47-48.

the evolution in which a modified complex entrance remains but the façade has become an integral and already dominant feature. Of the six cairns definitely of this type in Argyll and Bute one, Crarae itself, lies at about 46 ft. above sea level, one in Arran and one in Kintyre at heights between 150 and 350 ft. and three, two in Arran and one in Kintyre, at heights of over 350 ft.¹ It may be noted that the three Arran sites all lie at heights of over 150 ft. If, as is likely, the main weight of the early Clyde-Carlingford colonisation of the Clyde area was in Arran, then it is significant that none of the three cairns of this intermediate type in Arran should be found in immediate association with the raised beaches which were no doubt the focus of primary settlement. It may be therefore that such sites indicate an expansionist phase of settlement, which in Arran took the form of penetration of the interior, but which elsewhere, as at Crarae, might lead to colonisation of new territory altogether.

The association of an almost flat façade and a complex entrance at Crarae suggests, if this theory of evolution be correct, that the flat façade was earlier than the full crescentic façade. With the flat façade might be associated the trapezoid cairn, as in all likelihood at Crarae itself.

Evidence for Use of the Burial Chamber

The account in the Ordnance Survey Namebook refers to the 'human bones, and ashes' found some time prior to 1865 in the 'stone coffins' which are to be equated with the burial chamber. It seems fair to deduce from the recognition of the bones as human that at least one burial had been by inhumation. What is meant by 'ashes', whether calcined bones or merely charcoal, must remain uncertain.

The evidence from the present excavation is disappointingly meagre, no doubt largely because of the previous exploration, during which the rear and probably the front segments of the burial chamber appear to have been thoroughly gutted, the middle segment less so. Finds from the present excavation were recorded both in plan and in elevation (figs. 8, 9). Both cremated and unburnt fragments of bone and tooth were present. No relics at all were found in the front segment, but cremated bone occurred in the rear segment, and both cremated and unburnt bone in the middle segment. In general the apparently unburnt fragments of both bone and tooth seemed to occur at a lower level than the cremated fragments, as though cremated remains had originally been stratified above an inhumed burial or burials (fig. 8). If this were so, then it might be possible to interpret the cremated bone fragments in the rear segment as disturbed early in the nineteenth century from a cremation or cremations in the middle segment.

As has already been mentioned (*supra*, p. 13), there were slight indications that a setting of stones had been erected in the middle segment; possibly this was to protect an inhumed burial in the NE. corner of the segment. The potsherds and arrowhead were found towards the W. end of the segment, perhaps indicating a burial in this area. Examination of the teeth found seems to show that at least two individuals may be distinguished, an adolescent or young adult, between 14 and 20

¹ *ibid.*, 45, fig. 11, 49: recent planning of the cairn at Glecknahavill shows that it has a complex entrance with flat façade.

years old, and an adult between 25 and 35 years old. The bones examined indicate an adult at least 20 years old. The possibility that more than two individuals may have been buried is not excluded (Appces. D, E). A few hazel nuts from the middle segment may represent funerary offerings. All the charcoal samples tested from the burial chamber proved to be of hazel, with one exception, which was of oak (Appx. F).

Despite careful search, no finds at all were forthcoming from the front segment of the burial chamber. Although this may have been gutted early in the nineteenth century, it is hardly to be supposed that, had any burials been made in this segment, every trace of them would have been removed. It must therefore be inferred that burials were not made there.

The nineteenth-century exploration did not seem to have disturbed the stone slab which sealed the entrance, though some of the actual outer blocking which held it in position may have disappeared (fig. 6, Pl. IV, 2). The presence of such a slab to hold back outer blocking might imply that the burial chamber, after its final use, was not by any means packed to the roof with blocking material, in the fashion recently demonstrated by Professor Piggott for West Kennet.¹ Unfortunately, so thorough had been the early exploration that no certain evidence remained to show to what height the original deposit in the chamber had extended. But the absence of spoil heaps to either side of the burial chamber, and the large proportion of stones, including large slabs – all probably cairn material – in the recent filling might imply that the original deposit in the burial chamber was insufficient to fill it.

In summary, therefore, it may be said that the burial chamber was used for burials by both inhumation and cremation, with some suggestion that inhumation was the earlier rite. Funerary offerings included pottery, a flint arrowhead and perhaps hazel nuts. It is not impossible that all the burials were confined to the middle segment of the burial chamber, and that except for these the chamber was almost empty when its entrance was sealed by a stone slab, against which blocking was subsequently piled.

Chronology

The only artefact found during the excavation which might throw light on the period when the cairn was in use is the arrowhead (fig. 10). This appears to be of the carefully worked, lozenge-shaped variety which in England has Secondary Neolithic associations.² However, it is perhaps more likely that the arrowhead at Craræ indicates contact with N. Ireland rather than England, for in the Clyde-Carlingford cairn excavated by A. E. P. Collins at Audleystown, in Co. Down, all of the twelve arrowheads found were either lozenge-shaped or tended in that direction.³ Such arrowheads are rare in Scotland in Clyde-Carlingford contexts. If the arrowhead is, in fact, calcined, then it may have accompanied a cremated burial which, as has been argued above, was probably later than a primary inhumation or inhumations.

¹ *Antiquity*, xxxii (1958), 241-2.

² *Neolithic Cultures*, p. 355. A similar Secondary Neolithic connection for a Clyde-Carlingford cairn is suggested by the jet belt-slider found in the burial chamber of the cairn at Beacharra: *ibid.*, p. 359, fig. 63, p. 361.

³ *Ulster J.A.*, N.S. xvii (1954), 28-29.

Recently it has been argued that certain traits found in Clyde-Carlingford cairns in both Scotland and Ireland – namely the trapezoid cairn with flat façade, subsidiary burial chambers in addition to the main chamber, and the use of drystone walling in cairn construction – may have been derived from the Severn-Cotswold culture.¹ It was there suggested that these traits began to affect cairn construction in the middle phase of the Clyde-Carlingford culture on both sides of the North Channel, and Crarae was quoted as an example of the results of fusion of new with old ideas of cairn design. The argument need not be repeated here, but it may be pointed out that the typological and chronological link there proposed between Audleystown and Crarae receives some support from the presence of lozenge-shaped arrowheads in both.

CONCLUSION

The most important outcome of the excavation was to show that a Clyde-Carlingford cairn, apparently trapezoid in shape, might have a flat façade together with a complex burial chamber entrance consisting of outer and inner portal stones. The original burial rite associated with this structure was apparently inhumation, but cremation may later have been practised.

Ritual features probably connected with the construction of the cairn were deposits of marine shells in the forecourt and in the burial chamber, the latter best explained as a foundation deposit deliberately placed in the angle between septal slab and side slab at a point crucial for the stability of the burial chamber.

Typologically the cairn has been explained as intermediate between cairns with simple entrances, without façades, and cairns with fully developed semicircular forecourts, the complex entrance, consisting of two sets of portal stones, being an important stage in the development. Cairns showing similar typological features occur in Arran, Bute and Kintyre, so that the Crarae site, as might be expected, seems to be an offshoot from the Clyde area. Crarae indeed, with its well built drystone walling and probably trapezoid cairn, may show in its construction the results of influences coming from the Severn-Cotswold culture, influences which not only played their part in the evolution of some of the most elaborate of the Clyde-Carlingford cairns in Scotland but may have helped to set in train a considerable expansion of that culture in the middle stage of its development.

Present State of the Cairn

After the conclusion of the excavation the problem of conservation of the structure arose. Sir George most generously offered to make a gift of the site, and of an access route to it, so that the cairn could be taken into guardianship by the Ministry of Works. The Ministry, however, felt compelled through shortage of funds to decline this offer, but agreed to carry out the initial preservation of the cairn, by stabilising and in one instance replacing the side slabs of the burial chamber, and by reconstructing the drystone walling of the façade with such stones as might have fallen from it.

¹ *Antiquity*, XXXVI (1962), 97-101.

The greater part of the hedge which used to obscure the façade has been removed, and a path has been laid out by which the façade can be approached from the garden, so that both the façade and the burial chamber, which remains open, can be inspected. It is most satisfactory to report that, as a result of this enlightened action by Sir George, visitors to Craræ Gardens, which are open to the public from 1st April to 31st October, can see one of the most important prehistoric monuments of Mid Argyll.

APPENDIX A

The Excavation of the Fairy Knowe at Craræ

The excavation of the Fairy Knowe, as stated above (p. 1), was carried out by Sir George Campbell, assisted by Messrs D. MacRitchie and V. Hodgson, in August 1923. The results are summarised in this Appendix from an account which appeared in the *Oban Times* and from additional information kindly provided by Sir George.

The Fairy Knowe (fig. 12) is evidently the 'mound in a field below Craræ Inn' in which before 1865 a stone coffin 'containing Bones and Ashes' had been found and which, again before 1865, had been 'surmounted by a standing stone' (*supra*, p. 1). In 1923 one of the oldest local inhabitants at Craræ recalled speaking to a man who took part in what must have been the discovery of the 'stone coffin', from which it was estimated that that discovery took place eighty or ninety years prior to 1923. The tradition was that a chamber had been found and afterwards filled in with stones, and that two passages ran from it, one to the W. or SW., the other to the E. or SE. Another old inhabitant mentioned that 'crops' had been found, but this was not confirmed by the first.

In 1923 the Knowe appeared as a circular mound, some 108 ft. in diameter, 5-6 ft. high in the centre, lying on ground sloping gently from N. to S. A layer of soil, 6 in. to 1 ft. thick, covered the whole of the mound.

Four trenches were dug through the mound, and these are numbered I to IV on the diagram (fig. 12).¹ Cairn material consisting of solidly packed earth and stones, apparently undisturbed, was encountered in trench IV in the NW. sector, in the greater part of trench III and at the SW. end of trench II. In the rest of trench II and in trench I such material seems to have been absent. In the middle of trench I a small deposit of marine shells and blackened earth was found resting on the natural sand. A similar deposit, varying in thickness from 2 in. in parts of the trenches to 12 in. in the centre, overlay natural sand in the whole of trench II and in the greater part of the centre of the mound, where a space approximately 8 ft. square was cleared. Among the shells were found bones, teeth and an antler tine which, taken together, represented horse, cattle, sheep and deer (see below).

In the centre of the mound much of the stone mass was loose, without earth, and it was surmised that this was where the chamber had been. Not far from the centre was a stone slab, 4 ft. by 2 ft. 6 in. in size, lying on edge on top of the shell deposit. Similarly placed was another smaller slab touching the N. end of the first at an angle of 45°. Apart from these two slabs nothing else was found to suggest the wall of a chamber or passage, nor were there any slabs suitable for roofing. No pottery, worked stones nor bone, stone nor bronze objects were found. Some of the shells and pieces of bone are now in the museum at Fort William, Inverness-shire.²

The excavators believed that the Fairy Knowe was a chambered cairn, and the specimens in the museum are labelled as coming from such a site. In this assumption they were no doubt influenced by the tradition that passages were found when the Knowe was first opened. If this opinion be

¹ The diagram is not to scale, but based upon directions and dimensions given in the *Oban Times* article.

² Reg. no. 249. I am indebted to Miss Marion Campbell of Kilberry, *in litt.*, for this information.

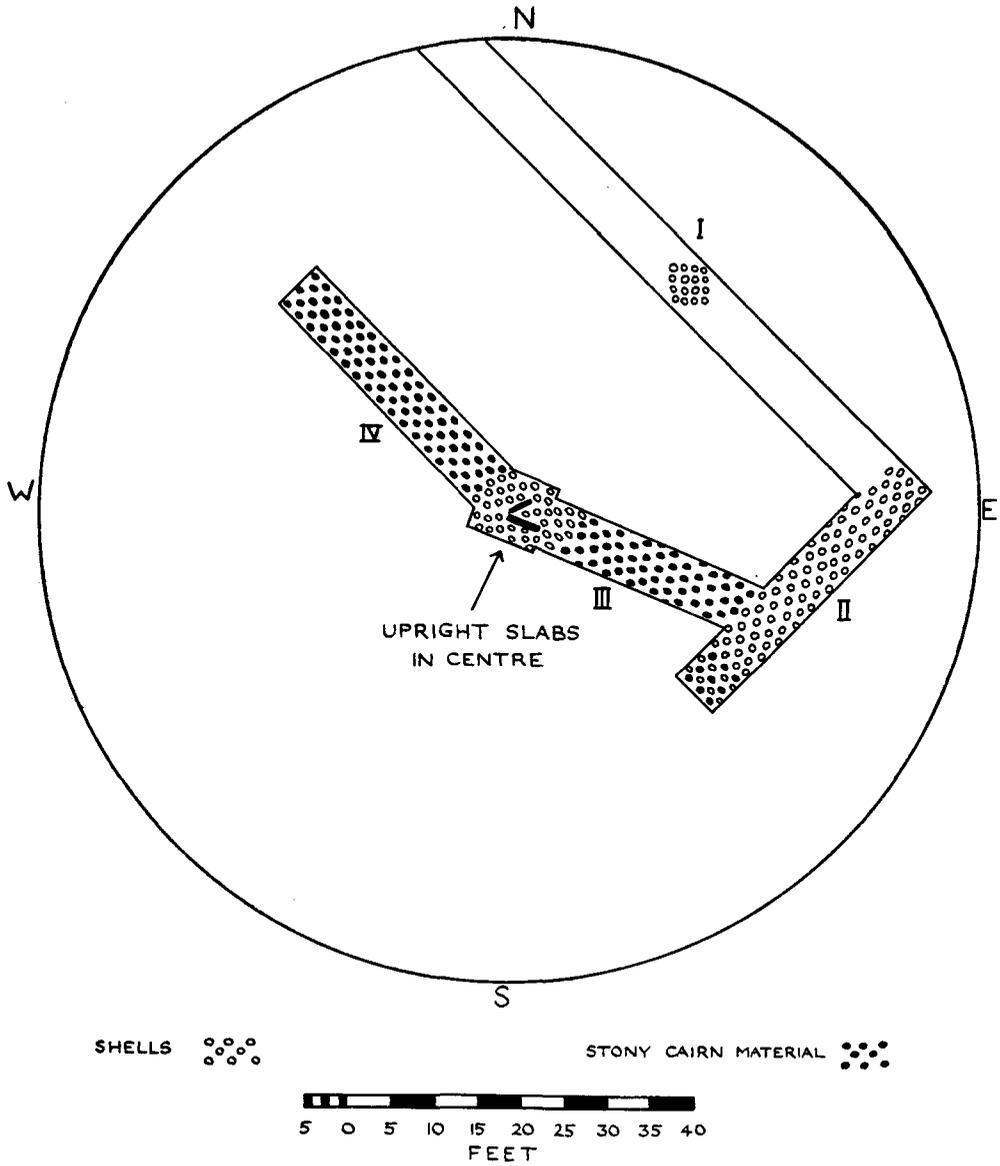


FIG. 12. The Fairy Knowe: reconstructed plan of the 1923 excavation

correct then the Knowe, being round, would appear to have been some sort of Passage Grave. However, the almost total lack of structural evidence for either chamber or passage is to be noted. Moreover, the tradition mentioned two passages, probably in line, joined apparently by the central chamber. Such a structure would not be expected in a Passage Grave.

The round cairn and the probably central 'stone coffin' would at first sight suggest a Bronze Age burial, but the passages, the standing stone said once to have surmounted the mound and the presence of horse bones amongst the animal bones, found apparently undisturbed, would argue against this. It is true that examples of horse bones beneath Bronze Age round barrows and of surmounting stones are quoted,¹ but such instances are rare, and to find both on one Bronze Age site would be highly unusual. The marine shells seem too widely spread to have been a funerary offering. Their presence may simply indicate that the Knowe was built upon a far older refuse heap. It may be noted that a standing stone on a mound of sand marked the Viking burials of a man and woman at Ardvouray, in Barra,² whilst a standing stone also marked a Viking burial at Ballinaby, in Islay,³ but the evidence seems insufficient for definite conclusions to be drawn about the date of the Knowe.

The following information about finds from the Fairy Knowe is contained in a letter from Mr E. Leonard Gill, of the Natural History Department, Royal Scottish Museum, Edinburgh, dated 3rd October 1923, and addressed to Mr D. MacRitchie:

'I am sending you herewith a list of bones, shells, etc., that I have been able to identify out of the collection that you left here in August. There is no difficulty or doubt about the shells or teeth. But the bones are all so fragmentary that it is hardly possible in most cases to do more than say that they are bits of ribs or vertebra or something else, without specifying the animals they came from.

'You will see from the list, however, that taking bones, teeth and antlers all together, there is proof of the presence of horse, cattle, sheep and deer. . . .

'List of identifiable animal remains in the Kitchen Midden material brought by D. MacRitchie, Esq.

Bones:	rib head of Horse cannon bone (metacarpal, fragment) of Ox fragment of axis vertebra (? Horse or Ox)
Antler:	one tine of Red Deer
Teeth:	molar of Sheep developing molar of Calf
Shells:	Oyster (<i>Ostrea edulis</i>) Scallop (<i>Pecten maximus</i>) Venus (<i>Dosinia exoleta</i>) Carpet-shell (<i>Tapes pullastra</i>) Cockle (<i>Cardium edule</i>) Razor-shell (<i>Solen</i> sp.) Limpet (<i>Patella vulgata</i>) Periwinkle (<i>Littorina littorea</i>) <i>Fusus</i> sp. ³

¹ Ashbee, P. *The Bronze Age Round Barrow in Britain*, London (1960), pp. 171, 176.

² *P.S.A.Lond.*, 2 ser. II (1861-4). 229-31.

³ *P.S.A.S.*, xiv (1879-80). 71.

APPENDIX B

Rock of Upper Quern Stone found unstratified in front of Façade

by N. HOLGATE, M.Sc., Ph.D., F.G.S.,
 Department of Geology, University of Glasgow

Dr Holgate's reference - H.1571, January 1962.

This rock is an extremely fresh and unaltered example of a Picritic Crinanite. It contains abundant olivine ($2V$ near 90° , hence composition about Fe_{90}) in well formed crystals which are set in a matrix dominated by large poikilitic crystals of a pale augite. Plagioclase forms only about 20% by volume of the rock; some of its platy crystals are enclosed optically by the large augites, while the rest of the plagioclase clusters in subparallel groups between the dark minerals, sporadically in the rock. A small amount of analcite, more or less altered, occurs interstitially to the major constituents.

The rock probably originated as an accumulative layer at or near to the base of a crinanite sill. Such sills seem to be absent from the mainland of Argyll: not one of a numerous collection of thin sections examined for purposes of comparison, originating in Kintyre, shows the modal mineralogy nor the texture characteristic of this rock.

Although crinanitic intrusions, both dykes and sills, are well represented in Arran, I have been unable to match the rock even among a fairly extensive sampling of Arran basic intrusives. The Claulchlands Sill, which might have been expected to show a basal layer relatively enriched in dark minerals, does not appear to develop any picritic phase comparable to the rock submitted by you.

A closely comparable rock-type does, however, occur low down in the Osgaig crinanite sill situated on the west coast of Raasay (see Davidson, C. F., *T.R.S.E.*, vol. 58, pt. II (1935), pp. 378-85). The Shiant Islands sill (see Walker, F., *Q.J.G.S.*, vol. 86 (1930), pp. 364-5) includes a horizon of similar mineralogy, though the rock there seems to differ in that the abundant olivines are characteristically rounded.

The Osgaig sill occurrence of picritic crinanite is admittedly rather far removed from Kintyre to be the ultimate source of the rock submitted, but against this consideration it is worthy of mention that the Osgaig sill picritic crinanite occurs in the vicinity of high-water mark on the Raasay shore at Churchton Bay, and might therefore come to the notice of members of a seafaring population.

APPENDIX C

Marine Shells from Forecourt and Burial Chamber

by MARGARET E. SCOTT, B.Sc.

The bivalve shells, such as Oyster, Mussel, Cockle, etc., were all found as separate shells, the hinges joining them having been broken or decayed. In a few cases, shells had smaller ones rammed tightly inside them. It seemed probable therefore that the shells were buried after the contents had been eaten.

The shells had been gathered from a variety of situations, ranging from the upper part of a rocky shore (Rough Periwinkle) to below low-water mark (Whelk and Scallop).

The occurrence of the Cross-cut Carpet shell is interesting since it is now scarce in the Clyde area.

I am grateful to Dr R. H. Millar of Millport Marine Station for confirming the identification of the Cross-cut Carpet shell and the Gaper shell.

THE CHAMBERED CAIRN AT GRARAE

25

<i>Species</i>	<i>No. in Forecourt</i>	<i>No. in Burial Chamber</i>	<i>Remarks</i>
Common Periwinkle (<i>Littorina littorea</i>)	510	2,050	Most numerous
Rough Periwinkle (<i>Littorina rudis</i>)	5	25	Probably collected accidentally
Flat Periwinkle (<i>Littorina littoralis</i>)	1	3	
Common Whelk (<i>Buccinum undatum</i>)	0	4	
Dog Whelk (<i>Nucella lapillus</i>)	3	10	
Limpet (<i>Patella vulgata</i>)	46	12	
Pullet Carpet (<i>Venerupis pullastra</i>)	750	250	Next most numerous
Cross-cut Carpet (<i>Venerupis decussata</i>)	15	2	
Scallop (<i>Pecten maximus</i>)	6	3	
Cockle (<i>Cardium edule</i>)	437	30	
Razor (<i>Ensis siliqua</i>)	24	24	
Oyster (<i>Ostrea edulis</i>)	650	25	
Gaper (<i>Mya truncata</i>)	2	3	Fragments of hinge only
Mussel (<i>Mytilus edulis</i>)	3	3	
Netted Dog Whelk (<i>Nassarius reticulatus</i>)	1	0	
Total	2,453	2,444	

APPENDIX D

Inhumed Bone Fragments from the Middle Segment of the Burial Chamber

by A. YOUNG, T.D., M.A., M.B., F.R.F.P.S.G.,

Department of Anatomy, Glasgow University

Although the bone fragments described below were not all found together they might well all have belonged to the same individual, a small but fully grown adult (i.e. aged at least 20), perhaps female.

Group A (CRA 45). Found with fragments of teeth (Appx. E) at the middle of the E. end of the segment, close to the septal slab and about 4 in. above the original floor.

1. Four fragments from pelvis, all from the left side.
2. Two fragments of right scapula.
3. Proximal phalanx of finger (? left 5th).

Group B (CRA 64). Found with fragment of tooth (Appx. E) and probably hazel nuts (Appx. F) in the NE. corner of the segment, 2-3 in. above the original floor.

Fragments of lower end of right humerus.

APPENDIX E

Teeth from the Middle and Rear Segments of the Burial Chamber

by PROFESSOR A. E. W. MILES, F.D.S., L.R.C.P., M.R.C.S.,

Department of Dental Histology and Pathology, The London Hospital Medical College

The 'enamel caps' described below are not partly formed teeth but consist of the enamel coverings of the crowns of fully formed teeth which have separated more or less intact. Traces of dentine remain inside them, but otherwise the dentine part of the tooth, including the root, has apparently been destroyed or not found (except, of course, with CRA 19 and CRA 45b).

Middle Segment of Burial Chamber

CRA 45. Found with fragments of bone (Appx. D) at the middle of the E. end of the segment, close to the septal slab and about 4 in. above the original floor.

(a) Complete enamel cap of a left upper permanent canine showing second degree wear (i.e. wear through the whole thickness of the enamel) of the incisive edge. A very approximate guess at the age would be 25 to 35 years.

(b) Fragment of a tooth showing grey or black fractured surfaces of dentine; the black appearance of the dentine suggests exposure to heat. The morphology is consistent with its being the middle portion of a human lower incisor (i.e. upper part of root and lower part of crown). It is hard to offer an opinion at all concerning age, but it is probably not from a young child.

(c) Fragment of enamel cap from a molar tooth, possibly the mesial part of a lower left permanent molar.

CRA 46. Found midway between the two septal slabs, about 10 in. from the S. side and about 2 in. above the original floor.

The crown of a left upper permanent molar with second degree wear of the occlusal surface, from which the age may be judged to be 14 to 20 years.

CRA 51. Found close to the W. septal slab, about 1 ft. from the S. side at the original floor level.

The enamel caps of two human upper premolars, one an upper left second premolar, the other probably an upper left first premolar. Both teeth have slight facets of wear approximally (between adjacent teeth), suggesting that they are from a young adult or adolescent.

CRA 64. Found with fragments of bone (Appx. D) and probably hazel nuts (Appx. F) in the NE. corner of the segment, 2-3 in. above the original floor.

The crown or enamel cap of an upper right second molar with some wear of the occlusal surface, from which an age of about 25 years might be estimated.

Rear Segment of Burial Chamber

CRA 19. Found in middle of segment, close to septal slab and about 5 in. above the original floor.

Two roots with black and grey *post mortem* fractured surfaces, one the root of an upper permanent molar, the other a buccal root of an upper molar; the blackish colour of the dentine is almost certainly due to exposure to heat. It is possible to fit two parts of the fractured surfaces together, so that the two roots are part of a single tooth. With regard to age it is not possible to say more than that the tooth is not that of a young child.

APPENDIX F

Charcoal and Nutshells from Burial Chamber

by J. ANTHONY, B.SC.,
Royal Botanic Garden, Edinburgh

Front Segment of Burial Chamber

CRA 80. Hazel.

Middle Segment of Burial Chamber

CRA 24. Oak.

CRA 31. Hazel.

CRA 49. Hazel nut.

CRA 56. Hazel.

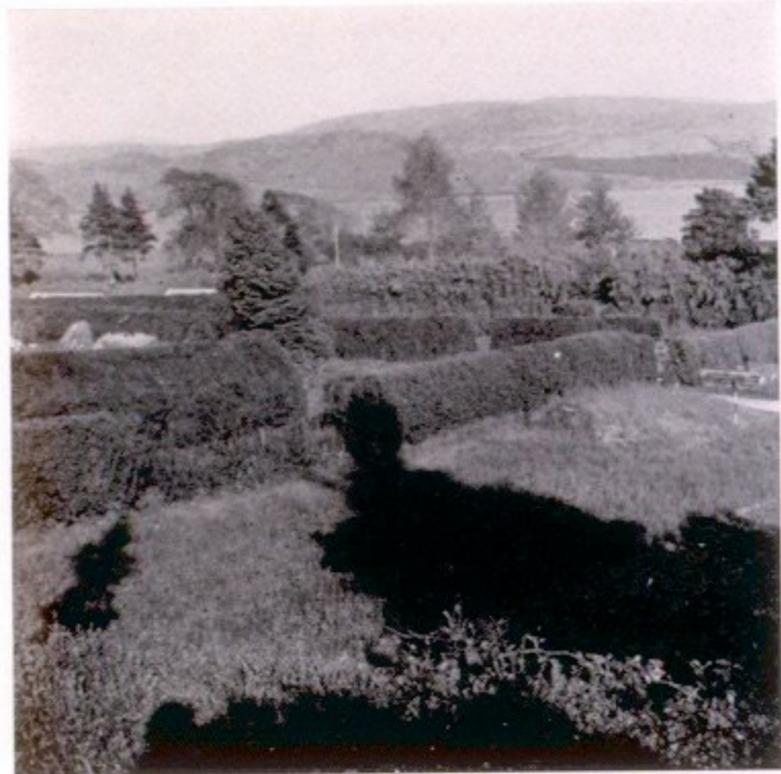
CRA 64. Probably hazel nuts (cf. Appx. D, Appx. E).

Rear Segment of Burial Chamber

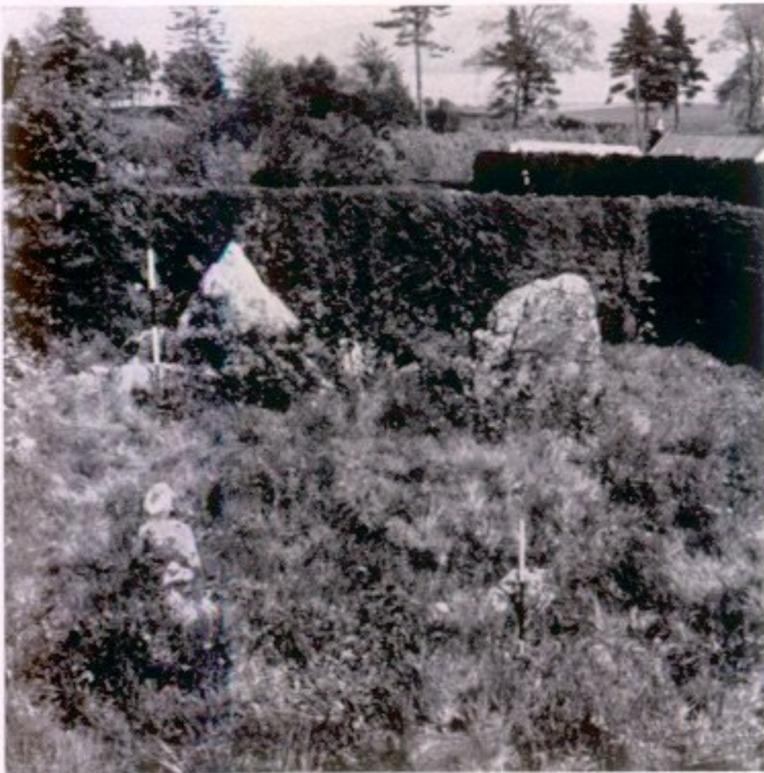
CRA 20. Hazel.



1. View of Crarae from the south towards Crarae Point and across Loch Fyne



2. The tail of the cairn in the forestry nursery; to the left, a façade stone is visible over the hedge



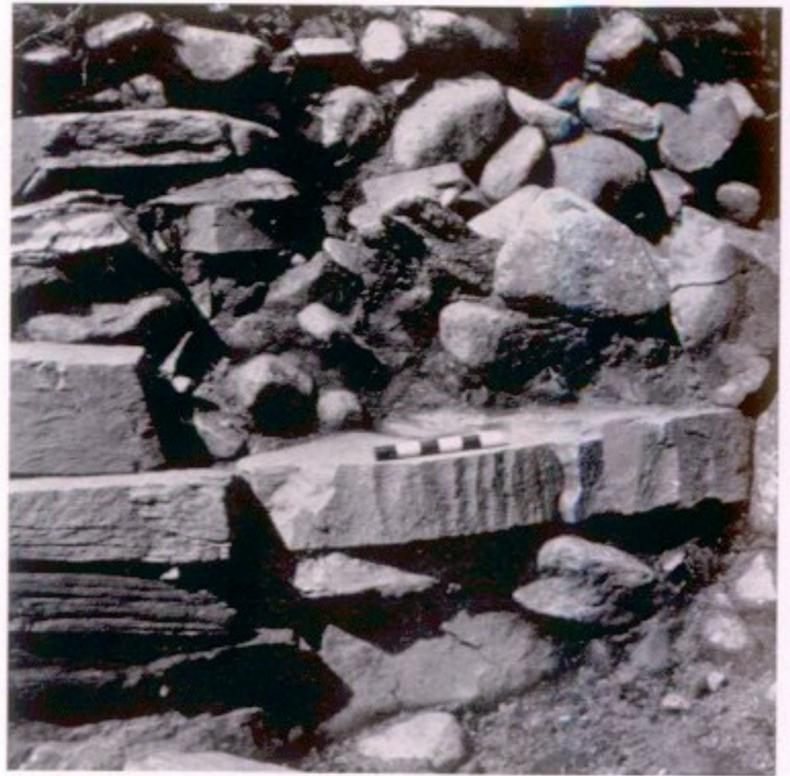
3. The burial chamber from the rear before excavation, showing the 'Killevin Stones' of the façade; the ranging rod stands in the entrance, the yardstick at the terminal slab



4. Cairn material exposed on the south side of the cairn



1. The front of the façade from the south, showing apparently original blocking with slipped drystone walling on top



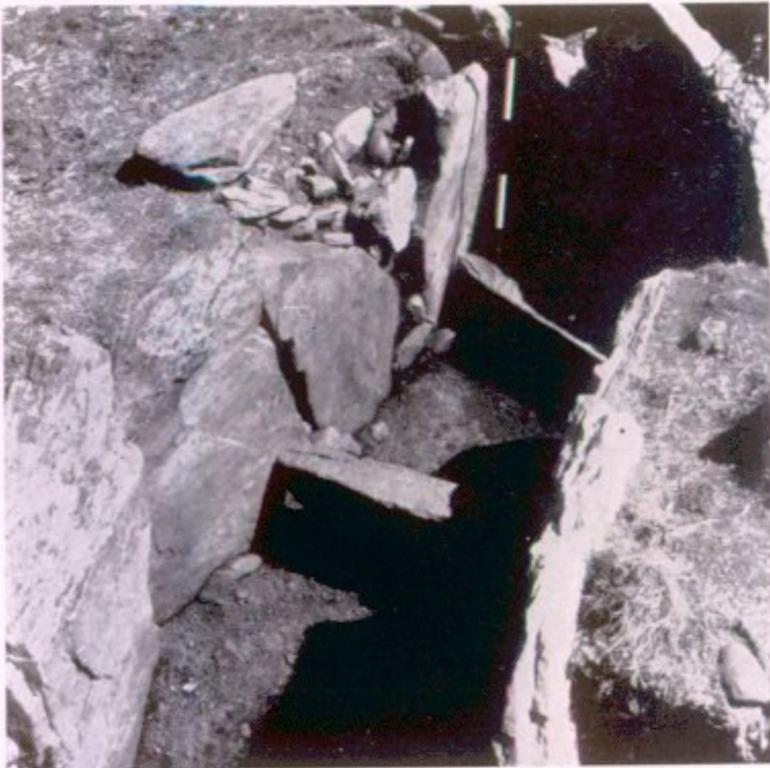
2. Drystone walling of the façade to the north of the entrance, showing trimmed stone



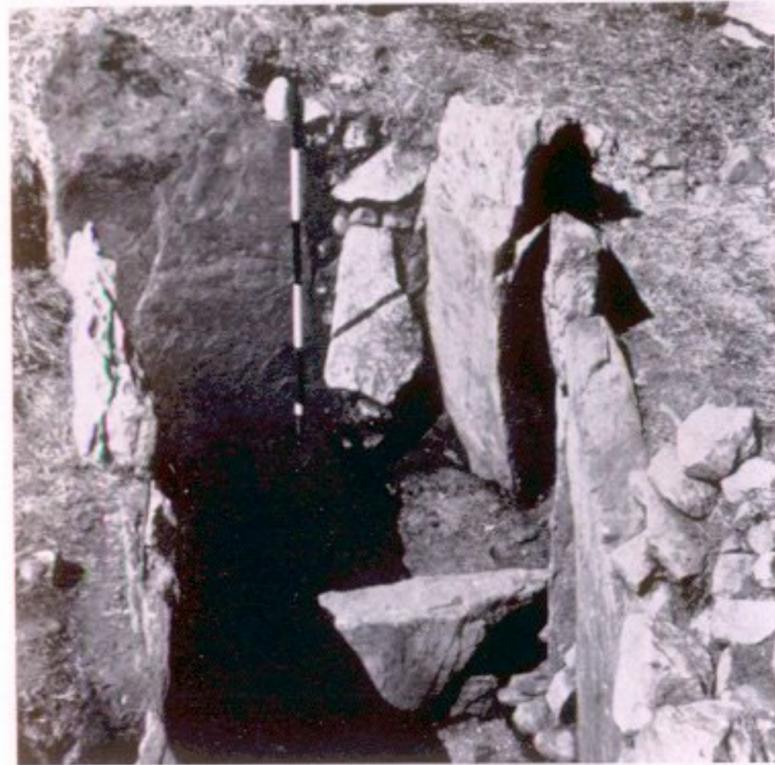
3. The front of the façade from the south, showing possible paving slabs



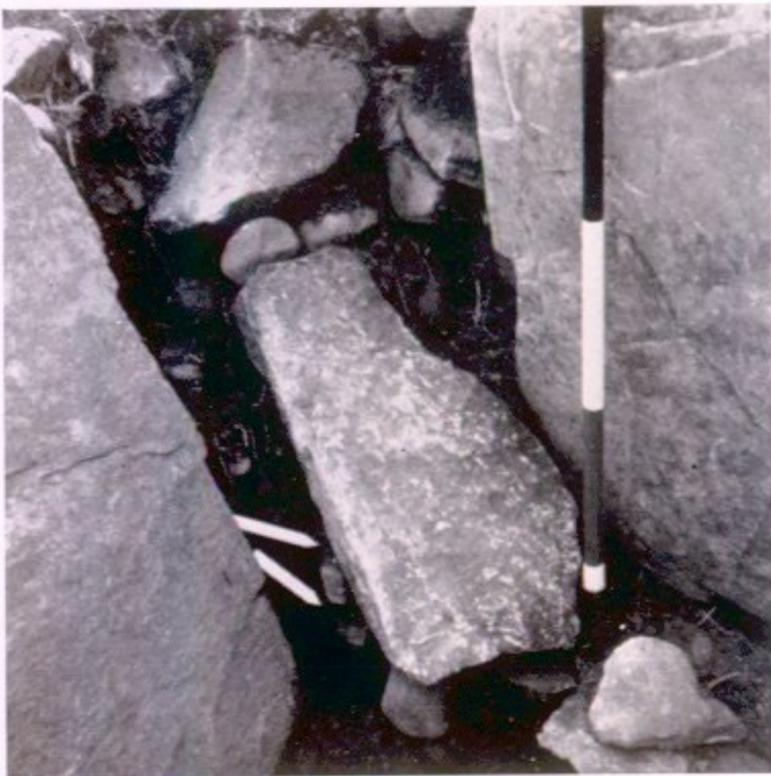
4. The front of the façade from the south, showing the entrance with the blocking stone and possible paving in front; the ranging rod stands in the socket of a missing façade slab



1. The burial chamber after excavation, but with the entrance, to the right of the ranging rod, not yet cleared



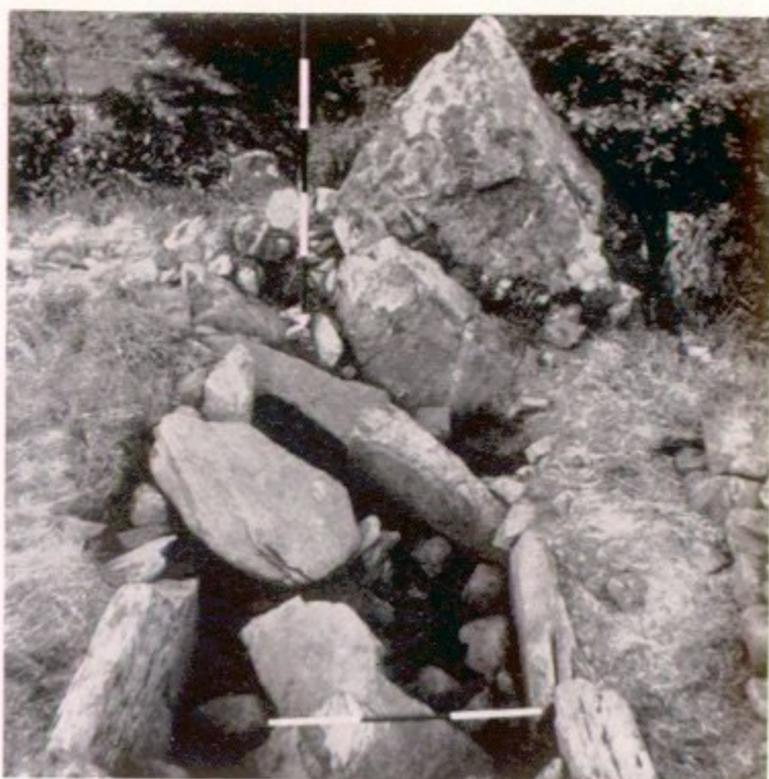
2. The burial chamber after excavation, showing the displaced slab at the rear



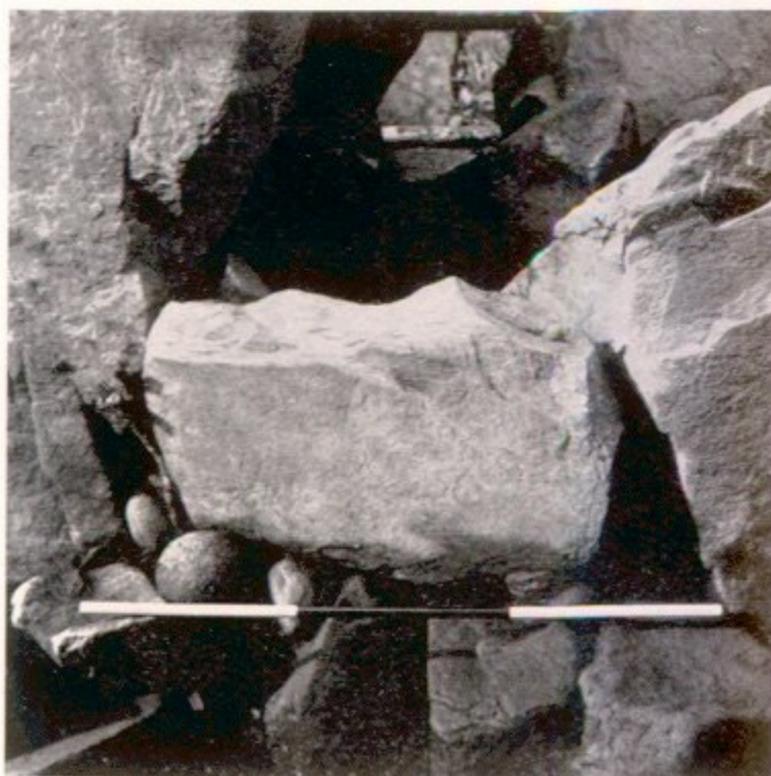
3. The rear of the burial chamber, showing the displaced slab; the arrows point to dry-stone walling



4. The rear of the burial chamber, showing dry-stone walling behind the displaced slab



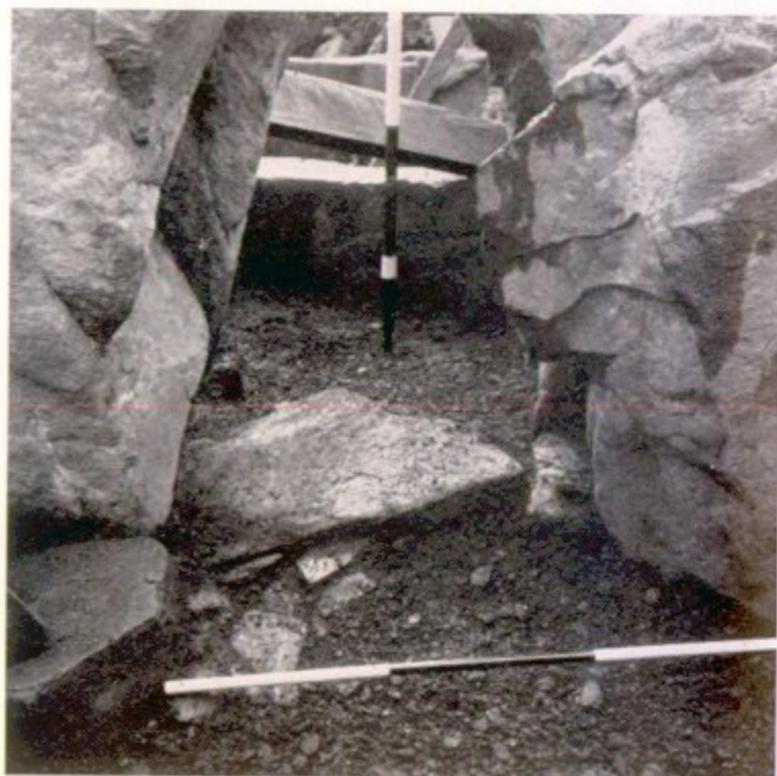
1. The burial chamber from the rear during excavation, showing probable slipped corbel slabs and displaced side slab



2. The burial chamber entrance from the east, before removal of the blocking stone



3. The burial chamber entrance from the south, showing the sill and outer and inner portal stones



4. The burial chamber entrance from the east, after removal of the blocking, showing the sill